

In the Claims

1. (Currently Amended) A nozzle for washing a gas turbine unit arranged to atomize a wash liquid in the air stream in an air intake of said gas turbine unit comprising a nozzle body, said nozzle body comprising:

an intake end for intake of said wash liquid and outlet end for exit of said wash liquid, and a center axis; and

a number of orifices connected to the outlet end and having ~~respective orifice openings~~means for atomizing wash liquid, wherein the atomizing means comprises one or more orifice openings; wherein said ~~respective~~ orifices are directed at an angle towards said center axis at a junction point at a distance within a range of 5-30 cm from said orifice openings, and wherein said ~~orifice openings~~orifices are ~~sized~~configured so that liquid emanates from said ~~respective~~ orifice openings at a spray angle that is within an angle range of $\geq 0-80^\circ$.

2. (Previously Presented) The nozzle according to claim 1 wherein each of said orifices is arranged at substantially the same distance from said center axis and at substantially the same angle with respect to said center axis.

3. (Previously Presented) The nozzle according to claim 1 wherein a pressure of said wash liquid at said orifices is within the range of 35-175 bar.

4. (Previously Presented) The nozzle according to claim 3 wherein said orifice openings are arranged to, in cooperation with said pressure, cause said liquid to stream out with a liquid velocity in the range of 50-250 m/s.

5. (Previously Presented) The nozzle according to claim 1 wherein said orifice openings have substantially the same design.

6. (Previously Presented) The nozzle according to claim 1 wherein said orifices are arranged to form a spray into a form in accordance with any one of from the group of substantially circular, substantially elliptical, or substantially rectangular.

7. (Previously Presented) The nozzle according to claim 1 wherein two orifices are connected to said outlet end.

8. (Withdrawn) A method for washing a gas turbine unit comprising:
atomizing a wash liquid in an air intake of said gas turbine unit by using a nozzle, said nozzle comprising a nozzle body comprising an intake end for intake of said wash liquid, an outlet end for exit of said wash liquid, and a number of orifices connected to said outlet end, said orifices having orifice openings;

producing said atomized wash liquid by delivering said liquid to said orifices, wherein said orifices are directed towards a center axis of said nozzle body at a junction point at a distance within a range of 5-30 cm from said orifice openings and at an angle towards the center axis so that the liquid emanating from respective orifice opening is within an angle range of 0-80°.

9. (Withdrawn) The method according to claim 8 wherein said orifices (42, 46; 42, 46, 60) are disposed at substantially the same distance from said center axis and at substantially the same angle with respect to said axis.

10. (Withdrawn) The method according to claim 8 wherein said delivering said liquid to said orifices comprises delivering said liquid to said orifices at a liquid pressure in the range of 35-175 bar.

11. (Withdrawn) The method according to claim 10 wherein said orifice openings are arranged to, in cooperation with said liquid pressure, cause said liquid to stream out with a liquid velocity in the range of 50-250 m/s.

12. (Withdrawn) The method according to claim 8 wherein said orifice openings have substantially the same design.

13. (Withdrawn) The method according to claim 8 wherein said orifices are arranged to form a spray into a form in accordance with any one of from the group of substantially circular, substantially elliptical, or substantially rectangular.

14. (Withdrawn) The method according to claim 8, wherein two orifices are connected to said outlet end.

15. (Currently Amended) A washing device for washing a gas turbine unit comprising at least one nozzle arranged to atomize a wash liquid in the air stream in an air intake of said gas turbine unit comprising a nozzle body, said nozzle body comprising:

an intake end for intake of said wash liquid and outlet end for exit of said wash liquid, and a center axis;

a number of orifices connected to the outlet end and having one or more respective orifice openings configured for atomizing wash liquid;

wherein said respective orifices are directed at an angle towards said center axis at a junction point at a distance within a range of 5-30 cm from said orifice openings, and wherein said ~~orifice openings~~orifices are ~~sized~~configured so that liquid emanates from said respective orifice openings at a spray angle that is within an angle range of $\geq 0-80^\circ$.

16. (Previously Presented) The washing device according to claim 15 wherein each of said orifices is arranged at substantially the same distance from said center axis and is angled at substantially the same angle with respect to said center axis.

17. (Previously Presented) The washing device of claim 15 wherein a pressure of said wash liquid at said orifices is within the range of 35-175 bar.

18. (Previously Presented) The washing device of claim 17 wherein said orifice openings are arranged to, in cooperation with said pressure, cause said liquid to stream out with a liquid velocity in the range of 50-250 m/s.

19. (Previously Presented) The washing device of claim 15 wherein each of said orifice openings have substantially the same design.

20. (Previously Presented) The washing device of claim 15 wherein said orifices are arranged to from a spray into a form in accordance with any one of from the group of substantially circular, substantially elliptical, or substantially rectangular.

21. (New) A method for washing a gas turbine unit comprising:

providing a nozzle apparatus comprising:

an intake end for intake of said wash liquid and outlet end for exit of said wash liquid, and a center axis; and

a number of orifices connected to the outlet end and having one or more orifice openings for atomizing wash liquid; wherein said orifices are directed at an angle towards said center axis at a junction point at a distance within a range of 5-30 cm from said orifice openings, and wherein said orifices are configured so that liquid emanates from said orifice openings at a spray angle that is within an angle range of $>0-80^{\circ}$;

atomizing wash liquid in an air intake of said gas turbine unit by using said nozzle apparatus, said nozzle comprising a nozzle body comprising an intake end for intake of said wash liquid, an outlet end for exit of said wash liquid, and a number of orifices connected to said outlet end, said orifices having orifice openings; and

injecting said atomized wash liquid into said gas turbine unit.

22. (New) The method according to claim 21, wherein said orifices are disposed at substantially the same distance from said center axis and at substantially the same angle with respect to said axis.

23. (New) The method according to claim 21, further delivering said wash liquid to said orifices at a liquid pressure in the range of 35-175 bar.

24. (New) The method according to claim 23, wherein said orifice openings are arranged to, in cooperation with said liquid pressure, cause said wash liquid to stream out with a liquid velocity in the range of 50-250 m/s.

25. (New) The method according to claim 21, wherein said orifice openings have substantially the same design.

26. (New) The method according to claim 21, wherein said orifices are arranged to form a spray arrangement according to at least one of the group consisting of substantially circular, substantially elliptical, and substantially rectangular.

27. (New) The method according to claim 21, wherein two orifices are connected to said outlet end.